

Work Order ID 162419

Tuesday, June 06, 2017 4:57:32 PM

162419

Page 1

Item ID: D3296-3 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Door Panel
Start Date: 6/9/2017 Start Qty: 4.00 ***4*** Cust Item ID:
Required Date: 6/16/2017 Req'd Qty: 4.00 ***4*** Customer:
Reference:

Approvals: Process Plan: DAS 21 Date: JUN 12 2017 Tooling: _____ Date: _____ Run Start ***NR1***
QC: 9-89 Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3296	B

100

0.03

100

FLOW WATER JET

Waterjet

Memo

0.24

FLOW CNC Waterjet

1-Cut as per Dwg D3296

Dwg Rev: B3Prog Rev: B3

2-Deburr if necessary

(4) SC 17/06/25

110

0.00

110

QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.04

Quality Control

(4) SC 17/06/25
P 17-06-25

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

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Page 2

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Revision ID: Stop ***NS2***
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Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.08				<u>4</u>			DAS 38 9-89 JUN 26 2017
130 *130* Small Fab Small Fab	Small Fab Memo Deburr	0.00 0.00							PIA DAS 38 9-89
140 *140* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.35				(x4)			20170703 BEB.

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 *150* QC Quality Control	QC7-Inspect Chemical Conversion Coat Memo	0.00 0.04				4			DAS 38 JUL 03 2017
160 *160* Packaging Packaging	Identify as per dwg & Stock Location: <u>57494</u> Memo LOCATION : LG001	0.00 0.04				✓			DAS 6 9-89 JUL 04 2017
170 *170* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.40							17/7/48 J

DAS
21
3-89

JUL 04 2017

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

Monday, June 05, 2017 4:53:48 PM

Page 130

Work Order ID: 162419

162419

Parent Item: D3296-3

D3296-3

Parent Item Name: Door Panel

Start Date: 6/9/2017

Required Date: 6/16/2017

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP C05.10.14Added step 14KJ/EC
IPP Rev:E Now on Waterjet 06-11-02 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M2024T3S.063

Purchased

No

110

sf

108.1400

0.6532

2.750316

M2024T3S 063

**

Sc 17/06/25

2024-T3 .063 sheet

Location

Loc Qty

Loc Code

MAT

6.6

m135512

6.6

MAT009

101.54

m134640

10.54

m135612

7.5

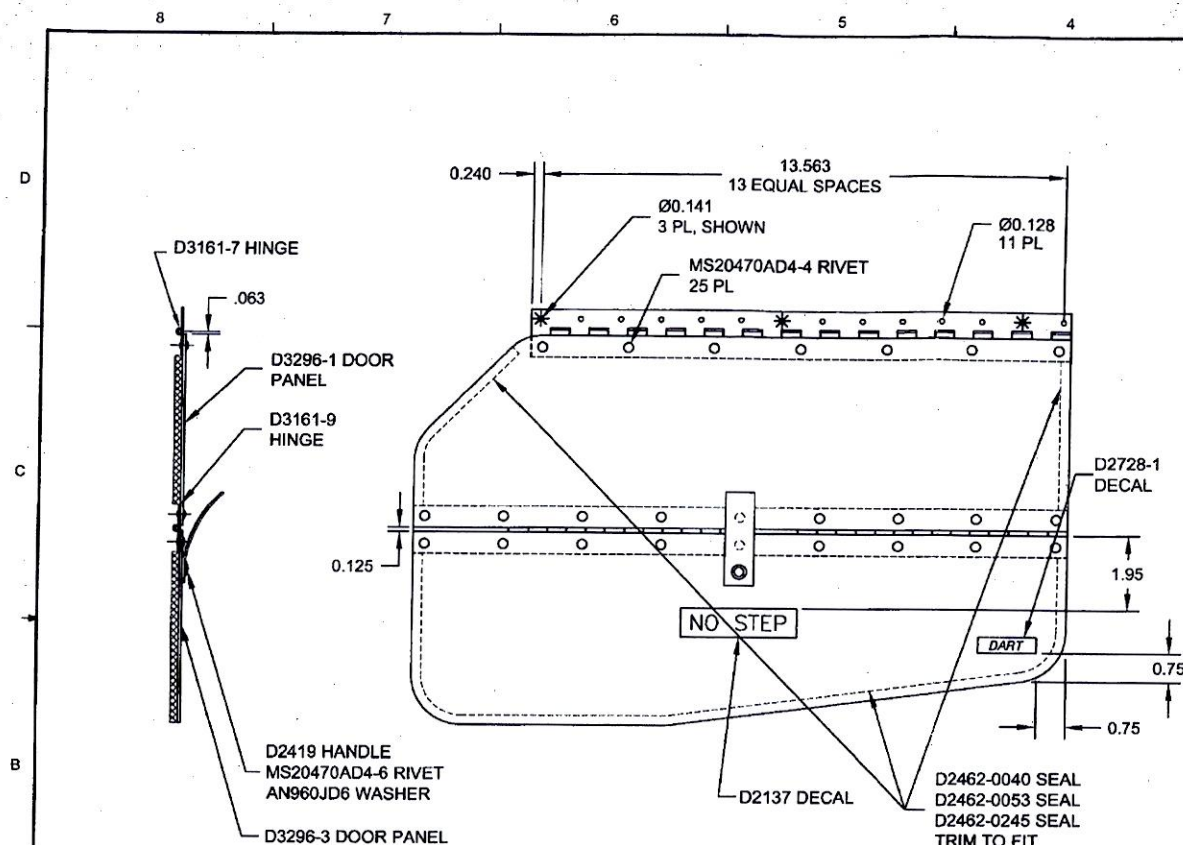
m137218

35.5

m137599

48

28



D3296-041 DOOR ASSEMBLY

D3296-041 NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT BLACK SANDTEX (4.3.5.7) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.8 lbs
- 8) INSTALL D2137 AND D2728-1 DECALS, D2419 HANDLE, AND D2462 SEALS AFTER POWDER COATING
- 9) FOLD AND FASTEN D2419 TO FORM 2.5" LONG HANDLE

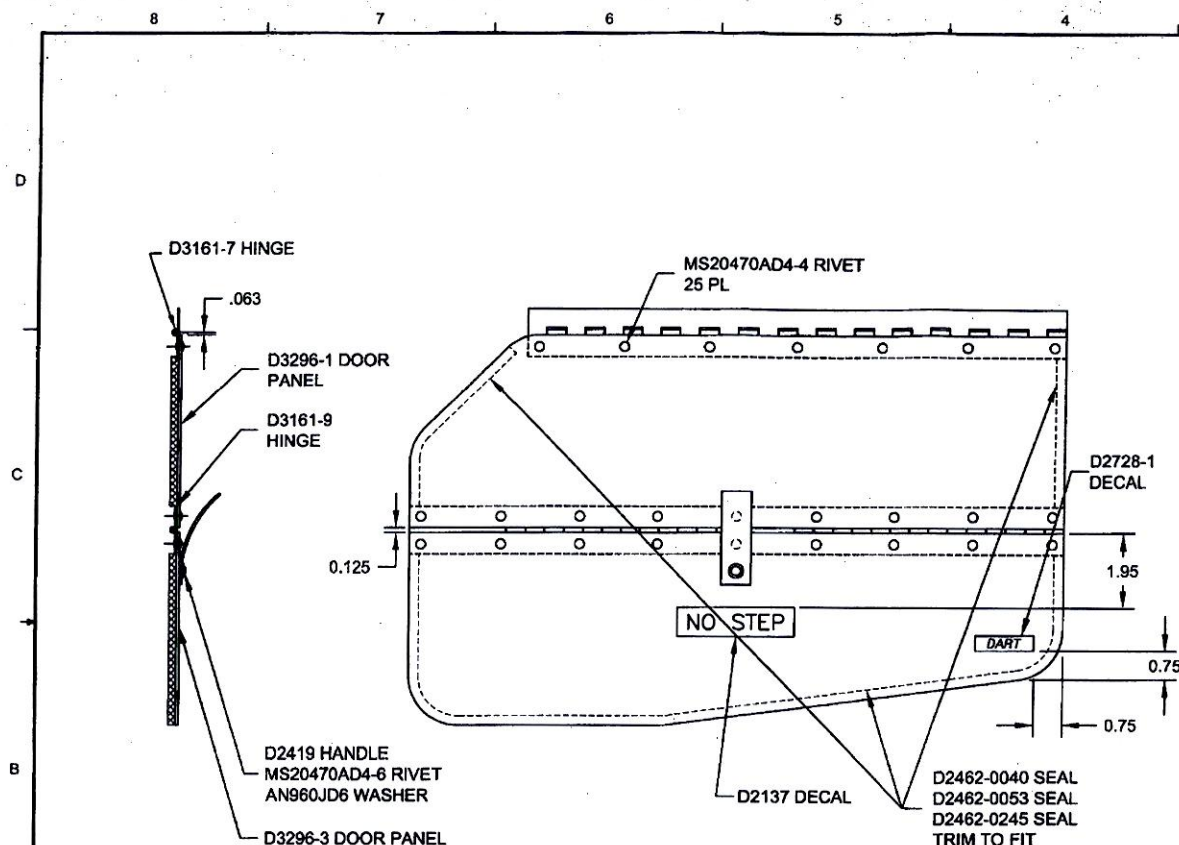
QTY	PART NUMBER	DESCRIPTION
X	D3296-041	DOOR ASSEMBLY
1	D2419	HANDLE
2	D2462-0040	SEAL
1	D2462-0053	SEAL
1	D2462-0245	SEAL
1	D2728-1	DECAL
1	D2137	DECAL
1	D3161-7	HINGE
1	D3161-9	HINGE
1	D3296-1	DOOR PANEL
1	D3296-3	DOOR PANEL
1	NAS1149DN6321	WASHER (OR AN960JD6)
25	MS20470AD4-4	RIVET
1	MS20470AD4-6	RIVET

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 162419 MCL

170672

RELEASED
2012-11-21

B	ADD D3296-041B, REF. PAR12-223.	MB	12.11.15
A	NEW ISSUE	CP	04.06.28
REV.	DESCRIPTION	BY	DATE
DESIGN	91	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	J		
CHECKED	MP	DRAWING NO.	REV. B
MFG. APPR.	MP	D3296	SHEET 1 OF 3
APPROVED	MP	TITLE	SCALE
DE APPR.	MP	DOOR ASSEMBLY	NTS
DATE	12.11.15	COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMERCE WITHOUT THE WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



D3296-041B DOOR ASSEMBLY, BLANK

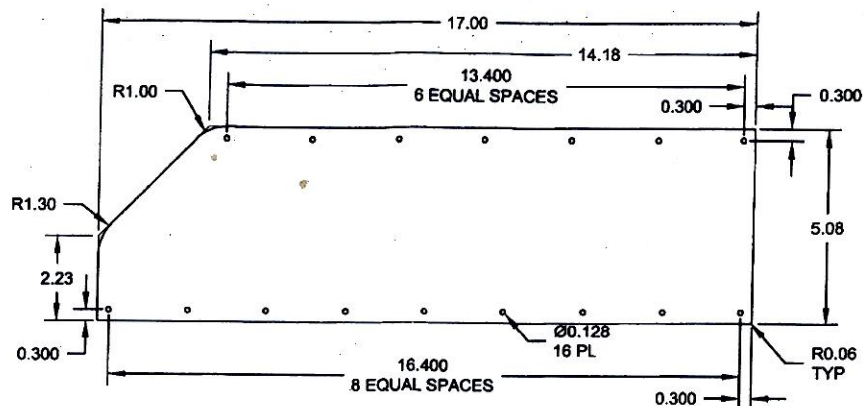
D3296-041B NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT BLACK SANDTEX (4.3.5.7) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.8 lbs
- 8) INSTALL D2137 AND D2728-1 DECALS, D2419 HANDLE, AND D2462 SEALS AFTER POWDER COATING
- 9) FOLD AND FASTEN D2419 TO FORM 2.5" LONG HANDLE

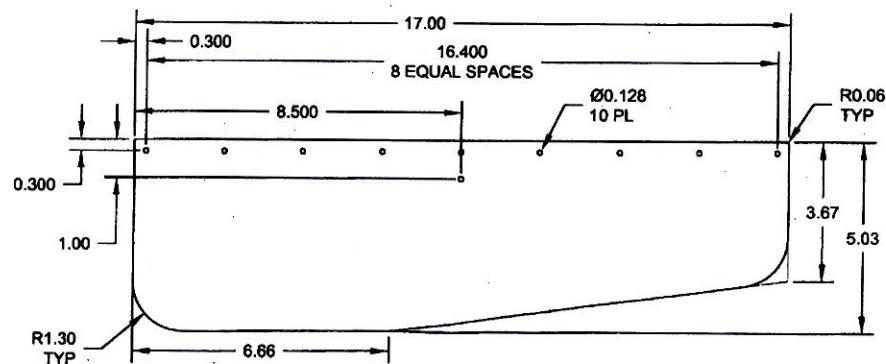
QTY -041B	PART NUMBER	DESCRIPTION
X	D3296-041B	DOOR ASSEMBLY
1	D2419	HANDLE
2	D2462-0040	SEAL
1	D2462-0053	SEAL
1	D2462-0245	SEAL
1	D2728-1	DECAL
1	D2137	DECAL
1	D3161-7	HINGE
1	D3161-9	HINGE
1	D3296-1	DOOR PANEL
1	D3296-3	DOOR PANEL
1	NAS1149DN632J	WASHER (OR AN960JD6)
25	MS20470AD4-4	RIVET
1	MS20470AD4-6	RIVET

RELEASED
2012-11-21
MMD

DESIGN	99	DART AEROSPACE LTD	
DRAWN	JP	HAWKESBURY, ONTARIO, CANADA	
CHECKED	JP	DRAWING NO.	REV. B
MFG. APPR.	JP	D3296	SHEET 2 OF 3
APPROVED	JP	TITLE	SCALE
DE APPR.	JP	DOOR ASSEMBLY	NTS
DATE	12.11.15	COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR FOR ANY COMMUNICATIONS TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



D3296-1 DOOR PANEL



D3296-3 DOOR PANEL

D3296-1/-3 NOTES:

- 1) MATERIAL: 2024-T3 ALUMINUM SHEET, 0.063 THICK, PER QQ-A-250/4 OR AMS-QQ-A-250/4 OR AMS 4037 OR ASTM B209 REF DART SPEC M2024T3S.063
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D3296-1 = 0.52 lbs; D3296-3 = 0.50 lbs

DESIGN	93	DART AEROSPACE LTD	
DRAWN	J	HAWKESBURY, ONTARIO, CANADA	
CHECKED	MP	DRAWING NO.	REV. B
MFG. APPR.	MP	D3296	SHEET 3 OF 3
APPROVED	MP	TITLE	SCALE
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2012-11-21
MP